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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/090,798 | 03/06/2002 | Amanda S. Schilling | 83202 | 6616 |
| 7590 08/17/2004 | | | EXAMINER . | |
| James B. Bechtel, Esq. NSWCDD (XDC1) Dahlgren, VA 22448-5100 | | | SRIVASTAVA, KAILASH C | |
| | | | ART UNIT | PAPER NUMBER |
| Dumgron, vii | 22.10.0110 | | 1651 | |
| | | | DATE MAILED: 08/17/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|--|-----------------------|--|--|--|--|
| | | SCHILLING ET AL. | | | | |
| Office Action Summary | 10/090,798 | | | | | |
| Office Action Guilliary | Examiner | Art Unit | | | | |
| The MAILING DATE of this communication app | Dr. Kailash C. Srivastava | orrespondence address | | | | |
| Period for Reply | ears on the cover sheet with the v | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on <u>07 June 2004</u> . | | | | | | |
| ,- | action is non-final. | İ | | | | |
| • | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) 1.4.5.7.10-16.22 and 23 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1.4-5.7.10-16 and 22-23 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | | | | | |

DETAILED ACTION

1. Applicants' responsive amendment "C" filed June 07, 2004 to Office Action mailed March 05,2004 is acknowledged and entered. The text of those sections of Title 35 U.S. Code not included in this action can be found in a prior Office action.

CLAIMS STATUS

- 2. Examiner wants to make clear on record that previously only Claim 20 was cancelled (See Applicants' Amendment B filed November 19, 2003), not Claims 2, 3, 6, 8, 9, and 17-21 as applicants state on Page 1 of Amendment filed June 07, 2004 (i.e., cited *supra*).
- 3. To clarify the record, Claims 2, 3, 6, 8, 9, and 17-21 have been cancelled.
- 4. Claims 1,4, 5, 7 and 10 have been amended.
- Claims 22-23 have been added.
- 6. Claims 1, 4-5, 7, 10-16 and 22-23 are pending and are examined on merits.

Claim Rejections - 35 U.S.C. § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

- 8. Claims 1, 4-5, 7, 10-16 and newly presented Claims 22-23 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Recitations, "rapidly" and "rapid" render Claim 1 vague and unclear because this term, in and of itself, does not adequately delineate its metes and bounds. Recitations "rapidly" and "rapid" are relative terms and mere perception of a person looking at them. These terms are subjective and therefore, do not establish any metes and bounds to distinguish those term from another. Applicants should clearly define metes and bounds for the terms "rapidly" and "rapid" in appropriate scientific units and definitions.

All other claims depend directly or indirectly from the rejected claims (e.g., Claim 1) and are, therefore, also rejected under 35 U.S.C. §112, second paragraph for the reasons set forth above.

Claim Rejections - 35 U.S.C. § 102

9. Claims 1, 10 and 16 stand rejected under 35 U.S.C. §102(e) as anticipated by Baugh et al. (U.S. Patent 6,656,919) for the reasons of record in the Office Action mailed) 3/05/2004.

In response to art rejections under 35 U.S.C. §102(e) to Claims 1, 10 and 16 in the Office Action mailed 03/05/2004, applicants argue that Baugh et al. do not anticipate the claimed invention as amended, because applicants invention is directed to "rapid decontamination". Applicants further argue that according to the 37 C.F. R. §1.132 Declaration from inventor Schilling, " only combination of dipicolinic acid and calcium ion provided superior rapid germination and not all concentrations of dipicolinic acid and calcium ions were superior to other prospective germinants, as seen for DPA-Ca (0.6 mM) after 15 minutes having a germination (%) of 67.17" and that " for rapid decontamination, the application of a given strength of dipicolinic acid and calcium ions is needed, as specified by the present patent application".

In response to applicants' above cited arguments, even though claims are read in the context of specification, the claimed invention needs to be incorporated within the claimed language. Nowhere, within the four corners of either the originally presented, or amended claims, or in the specification have the applicants claimed that only certain strength of each of dipicolinic acid and calcium ion is essential to the rapid decontamination of spores as argued and that said DPA-Ca concentration is 0.6 mM for an exposure time of 15 minutes.

Applicants' response to rejections to Claims 1, 10, and 16 under 35 U.S.C.§ 102 (b) in the Office Action mailed 03/05/2004, has been fully and carefully considered but is not persuasive for the reasons discussed above and on pages 2-3, item 8 in the Office Action mailed 03/05/2004.

Claim Rejections - 35 U.S.C. § 103

10. Claims 1, 4-5, 7, 10-16 and newly presented Claims 22-23 remain rejected under 35 U.S.C. § 103 (a) as obvious over Baugh et al. (U.S. Patent 6,656,919) in view of Paidhungat et al. (Journal of Bacteriology, 2000, Volume 182, Pages 2513-2519), Baker et al (U. S. Patent 6,506, 803) and are further obvious over Clouston (U.S. Patent 3,617,178) in view of Paidhungat et al. (Journal of Bacteriology.2000, Volume 182, Pages 2513-2519) and Baker et al (U. S. Patent 6,506, 803).

Newly presented Claims 22 and 23 encompass the same subject matter as has been previously examined in the Office Action mailed 03/05/2004.

In response to the art rejections in Office Action cited *supra*, applicants argue that the claimed invention is unobvious over the cited references, because the cited references do not disclose or suggest, or provide motivation to arrive at the presently claimed invention. Applicants further ague that Baugh et al. reference does not particularly point out a given combination of a germinant and Examiner cited secondary references do not remedy that deficiency because those references do not address applicants' claimed invention as amended, because applicants' amended claims are directed to "rapid decontamination" resulting from spore germination within a limited amount of time (i.e., 15 minutes) when the contaminant is treated with a particular germinant comprised of a certain composition in a certain concentration (i.e., DPA-Ca (0.6 mM giving 67.17% spore germination).

Applicants' arguments regarding rejections to Claims 1, 4-5, 7, 10-16 under 35 U.S.C. §103(a) in Office Action mailed 03/05/2004 have been fully considered but are not deemed to be persuasive because of the above cited discussion under item 9 of present Office Action, for the reasons of record at pages 3-7, item 9 of the Office Action cited *supra* and further in view of Figure 4 at Page 2517 *of* Paidhungat et al. which clearly shows that a combination of 60 mM each of dipicolinic acid and Ca⁺² gives maximum spore germination.

In response to applicants' arguments against the references individually, one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, those reasons have been discussed above and also cited at pages 3-7, item 9 of the Office Action mailed 03/05/2004. Furthermore, a rejection under 35 U.S.C. § 103 (a) based upon the combination of references is not deficient solely because the references are combined based upon a reason or technical consideration which is different from that which resulted in the claimed invention (*Ex parte Raychem Corp*, 17 U.S.P.Q. 2d 1417).

CONCLUSION

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR §1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 12. No Claims are allowed.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kailash C. Srivastava whose telephone number is (571) 272-0923. The examiner can normally be reached on Monday to Thursday from 7:30 A.M. to 6:00 P.M. (Eastern Standard or Daylight Savings Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached on (571) 272-0926 Monday through Thursday. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Kaijash C. Srivastava, Ph.D.

Patent Examiner Art Unit 1651

(571) 272-0923 August 10, 2004 RALPH GITOMER

PRIMARY EXAMINER GROUP 1200